

510(k) Summary

[in accordance with SMDA of 1990, 21 CFR 807.92(c)]

MAR - 7 2012

Contact: Mr. Hartmut Loch
Vice President, Regulatory Affairs & Quality Assurance
Phygen, LLC.
2301 Dupont Drive, Suite 510
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Date Prepared: February 3, 2012

Trade name: LEUCADIA™ 4.5 mm Pedicle Screw System

Common name: Spinal Fixation System

Classification name: § 888.3070 – Orthosis, Spinal Pedicle Fixation, For Degenerative Disc Disease (NKB) - Class III
§ 888.3050 - Appliance, Fixation, Spinal Interlaminar (KWP) - Class II
§ 888.3060 - Spinal Intervertebral Body Fixation Orthosis (KWQ) - Class II
§ 888.3070 - Pedicle Screw Spinal System (MNI) - Class II
§ 888.3070 - Pedicle Screw Spinal System (MNH) - Class II

All Orthopedic Device Panel 87

Product Code (s): NKB, KWP, KWQ, MNI, & MNH

Device Description and Characteristics: The Leucadia™ 4.5 mm Pedicle Screw System is intended to help provide correction, immobilization and stabilization of spinal segments as an adjunct to fusion of the thoracic, lumbar and/or sacral space.

The Leucadia™ 4.5 mm Pedicle Screw System consists of 4.5 mm diameter screws, which are available in 7 different lengths: 25 mm, 30 mm, 35 mm, 40 mm, 45 mm, 50 mm, and 55 mm. All sizes are able to receive 5.5mm connecting rods only. The Leucadia™ 4.5 mm Pedicle Screw System implant components are fabricated from medical grade titanium alloy (Ti-6Al-4V ELI) conforming to ASTM F136 or equivalent.

The Leucadia™ 4.5 mm Pedicle Screw System is a temporary implant system intended to be removed after solid fusion has occurred. Leucadia™ 4.5 mm Pedicle Screw System implant components are an addition to the existing Leucadia™ Pedicle Screw System (K110588 – S/E May 25, 2011). It should not be used with components from any other manufacturer. As with all orthopedic implants, Leucadia™ 4.5 mm Pedicle Screw System components should not be reused.

Equivalence: The additional Leucadia™ 4.5 mm screws are substantially equivalent to the LEUCADIA™ Pedicle Screw System (K110588 – S/E May 25, 2011), which is manufactured and marketed by Phygen, LLC.

Indications: The LEUCADIA™ 4.5 mm Pedicle Screw System is intended to be used as an adjunct to fusion using autograft or allograft in posterior, non-cervical fixation for the following conditions: degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e. fracture or dislocation); spinal stenosis; curvatures (i.e. scoliosis, kyphosis and/or lordosis); tumors; pseudarthrosis; and/or failed previous fusion.

Performance data: Biomechanical tests per ASTM F1717-10 (Static Compression Bending, Static Torsion, and Dynamic Compression Bending) as well as the Screw Pullout Tests per ASTM F543-07 have been performed. The test results were equivalent to the predicate device and/or other similar implants and are sufficient for *in vivo* loading.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
10903 New Hampshire Avenue
Document Control Room - WO66-G609
Silver Spring, MD 20993-0002

MAR - 7 2012

Phygen, LLC
% Hartmut Loch
Vice President, Regulatory Affairs & Quality Assurance
2301 Dupont Drive #510
Irvine, California 92612

Re: K120355
Trade/Device Name: LEUCADIA™ 4.5 MM Pedicle Screw System
Regulation Number: 21 CFR 888.3070
Regulation Name: Pedicle screw spinal system
Regulatory Class: II
Product Code: NKB, MNI, MNH, KWP, KWQ
Dated: February 3, 2012
Received: February 6, 2012

Dear Hartmut Loch:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21

CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,



for Mark N. Melkerson
Director
Division of Surgical, Orthopedic
and Restorative Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): K120355

Device Name(s): LEUCADIA™ 4.5 mm Pedicle Screw System

Indications for Use:

The LEUCADIA™ 4.5 mm Pedicle Screw System is intended to be used as an adjunct to fusion using autograft or allograft in posterior, non-cervical fixation for the following conditions:

Degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e. fracture or dislocation); spinal stenosis; curvatures (i.e. scoliosis, kyphosis and/or lordosis); tumor pseudarthrosis; and/or failed previous fusion.

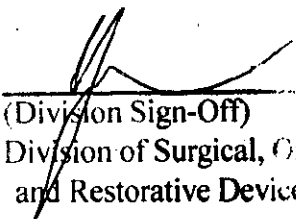
Prescription Use X AND/OR Over-The-Counter-Use

(Part 21 CFR 801 Subpart D)

(21 CFR 801 Subpart C)

PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED

Concurrence of CDRH, Office of Device Evaluation (ODE)



(Division Sign-Off)
Division of Surgical, Orthopedic,
and Restorative Devices

510(k) Number K120355